Researching doctoral pedagogy close up

Design and action in two doctoral programmes

Susan Danby

Queensland University of Technology

Alison Lee

University of Technology, Sydney

With growing international interest in diversifying sites for pedagogical work within the doctorate, doctoral programmes of different kinds are being developed in different disciplinary, institutional and national settings. However, little is known about how the pedagogical work of these programmes is designed and enacted, and with what effects. In this paper, we present two cases of doctoral pedagogical work being undertaken within different disciplinary and institutional settings to describe how learning opportunities were designed and to theorise what it means to be engaged in doing doctoral pedagogy. Starting from the position that working from a design model supports systematic and rigorous documentation and development of pedagogy, we employ the twin concepts of design and action, drawing broadly on rhetorical and ethnomethodological understandings of pedagogy as social action. Of particular interest within the concept of design itself is the concept of enactment, the translation of designs into the practices of doctoral work. Together, the two cases become a resource for 'slowing down' and making visible the practices of doctoral pedagogy that often go unrecognised because they appear so ordinary and everyday. This call for examining close-up existing doctoral education practices and relationships is attending to the 'next challenge for doctoral education' (Green, 2009).

Introduction

I would play 33 rpm records at 45 rpm and hear the bass parts revealed, rescued from the bowels of the arrangement an octave higher, and the fast sections of the upper octaves on forty-fives so that they could be learned at a slower speed. I realised from these experiments that anything, no matter how complex, could be deconstructed and learned if you slowed it down enough to really hear it. (Sting, Broken Music, 2003, p. 17)

In his 2003 autobiography, Broken Music, Sting's description of how he went about learning music offers a way to understand a key methodological principle at

work in this paper. Closely observing and 'slowing down' the process of studying a phenomenon offers opportunities to see what is happening in the 'doing' of the practice in ways that are not readily available in the flow of real-time events, particularly if these appear ordinary, unexceptional, already brought together and present in a seemingly self-evident way.

Our purpose in taking a close look at the work of doctoral pedagogy is to contribute new knowledge and insight to a field undergoing rapid change and reshaping of policy and practice. In the Australian doctoral policy and practice environment, in line with economically driven pressures internationally, we are seeing a growing demand for the development of doctoral programmes that

meet a diverse and increasingly complex array of requirements. These include preparation of doctoral graduates to research in environments within and outside the university that are increasingly entrepreneurial (Adkins, 2012); building capacities to research in interdisciplinary teams and to form researching partnerships across sectors (Willetts, 2012); and more recently, a rather belated realisation, within the USA at least, that success in a global knowledge economy for advanced nations involves attending carefully to the 'pipeline' of potential doctoral students; hence the need to attend afresh to teaching at undergraduate levels (Austin, 2011). This latter move connects doctoral education back to academic preparation in the fullest sense, not just to facilitate individual career paths but to replenish a sector where the academic workforce is aging and the field of higher education is undergoing major shifts internationally.

In Australia, these changes translate into increasing interest and focus upon expanding and diversifying sites for pedagogical work within the doctorate (e.g. Boud & Lee 2009, Aitchison, Kamler & Lee 2010). By 'pedagogical work,' we are referring both to explicit programmes of structured activity such as courses and workshops, and to the more incidental and everyday educational work embedded in research activities. The term pedagogy draws attention to how learning and teaching are often embedded in activities and relationships not always explicitly designated as educational. We are interested in turning a more explicitly pedagogical gaze upon these activities to see how they develop the experiences and capabilities in doctoral students to become the kind of future research workforce described above, and supplement the formal supervisor-student relationship.

In our recent work we have been investigating doctoral programmes across a range of disciplines and sites in a number of countries around the world, seeking to tease out principles and frameworks, as well as specifying sets of activity that engage doctoral students and researchers in modelling and developing the target experiences, practices and capabilities (Lee & Danby 2012). We have undertaken this investigation of pedagogical practices in an environment where the close-up focus on what goes on 'in the swamp' of the daily life of doctoral work is still remarkably undocumented. While there is a growing body of work attending to students' and supervisors' accounts of their experiences of doctoral programmes of one kind or another, little is known of how such programmes are played out in situ. Yet, as Green (2009) points out, an examination of these practices and relationships is the 'next challenge for doctoral education'. This paper takes

up the challenge of contributing to a documentation of some of the practices and dynamics of doctoral pedagogies, understood and framed as forms of social practice. We have drawn on and extrapolated from our recent work a set of principles that constitute a conceptual frame for engaging with pedagogical work in doctoral education. This frame is constituted through the twin concepts of design and action, drawing broadly on rhetorical and ethnomethodological understandings of pedagogy as social action (Danby & Lee 2012).

The focus on doctoral pedagogy attends to the work of bringing together, and enacting, practices of doing doctoral research and doing doctoral education. Some sets of activities within the bundle of activities recognisable as doctoral education are specifically educational, focusing on the learning or training of doctoral students, such as seminars and workshops. Other sets of activities are more recognisable as related to the core activity of participating in research, through labwork, fieldwork, datawork, information work, textwork, and so on, and what happens is that the pedagogic work of those activities often remains invisible or is treated as incidental.

In the following sections we first outline some conceptual resources for considering pedagogy in terms of two related concepts: design and action. We then present two cases of pedagogical work being undertaken within different disciplinary and institutional settings. Each case is elaborated elsewhere (Abrandt Dahlgren et al., 2012; Harris et al., 2012); each is deeply embedded in research activity and demonstrates how educational work can be explicitly designed and foregrounded. Both sites illustrate the pedagogic work of configuring and enacting doctoral practices, knowledge, skills and understandings. The discussion in the final section draws through the implications for research and scholarly inquiry into doctoral pedagogy that enable opening up the growing complexity of the field and its potential for change.

'If you slowed it down enough to really hear it': understanding pedagogy as design and action

Starting from the position that working from a design model supports systematic and rigorous documentation and development of pedagogy, we look 'up close' to explore what happens between a design plan and a practice, in order to better understand what it means to be engaged in doing doctoral pedagogy.

The case studies in the following two sections are, first, of Doctoralnet, an international network of doctoral

students and researchers engaging in online and face-toface interactions and, second, a transcript analysis group where a group of researchers - including supervisors and research students - meet regularly to discuss a selected transcript of an audio or video recording. Each case demonstrates, in different ways, key features of how doctoral pedagogies are designed, brought together and accomplished. We deploy two inter-related conceptual framings: the first conceptualises pedagogy as design, and the second as practice-in-action.

According to Kamler and Thomson (2006, p. 18), doctoral pedagogy is above all a question of design:

The pedagogue deliberately designs experiences, tasks, events, conversations which create the opportunity for the student to ... move both identity and knowledge simultaneously.

We take up and develop Kamler and Thomson's (2006) point that design is a multi-faceted and orderly action. In order to do this, we focus on three salient elements that, we argue, articulate the concept of design in relation to doctoral pedagogy. First, the arrangement of form and appearance make visible the pedagogical work of setting up the circumstances and conditions under which students may engage in activities conducive to advanced doctoral research learning. Doctoral educators 'enable' learning through setting up opportunities for critical exchange and action relevant to disciplines and research fields. Decisions about pedagogical design in doctoral education involve reconciling competing demands: this rather than that, this before that, and so on. Such considerations attend to the craft of designing pedagogical spaces that afford such possibilities.

Second, the concept of design draws attention to the social and collective nature of the endeavour of doing doctoral work, making visible regularities, patterns, freedoms and constraints that are produced as the accomplishment of ongoing actions. Design has no meaning in a social vacuum; it invokes particular, intelligible patterns of relationships among elements. These patterns are neither overly determined, in the sense that they do not dictate action in a closed or deterministic manner; nor are they arbitrary; rather, in the case of doctoral pedagogy, they are shaped with reference to the actual practices of the research environments of the disciplines and fields in which they are embedded. The elements of the design entail relationships among human participants that are institutionally prefigured yet supple enough to be inventively re-configured and remade. They also entail different kinds of relationships of time, duration, proximity, distance and the material artefacts of doctoral work:

offices, books, information and social media, and so on. This feature of design recognises that the particular social and institutional orders are made and remade through participation in these relationships.

Third, design entails within it the associated concept of enactment - the translation of ideas into the practices and products of doctoral work. These enactments occur within particular scholarly contexts, shaped by and shape the research and knowledge domains of which they are a part. In doctoral pedagogy, these enactments involve certain recognisable performances - of being a student, a scholar, a supervisor, a peer reviewer etc, as well as a re-invention of familiar modes of action such as seminars as more explicitly pedagogical modes, and the invention of new ones, such as posting live to YouTube, videoconferencing or the production of different kinds of knowledge objects (Green, 2009) as the outcomes of doctoral work. These enactments draw attention to the key feature of all designs: that they are co-configured through the enactments of participants within particular disciplinary and institutional environments. Here the non-deterministic characteristic of design is made visible through a kind of moving forward in time, through process, sequencing and co-production of the activities and events.

Developing the element of enactment to an articulation of our concern with pedagogical work is our use of the concept of 'pedagogy-in-action'. This term is closely tied to the conceptualisation of culture in action (Baker, 2000; Danby, 2005) in that 'members use culture to do things, but that culture is constituted in, and only exists in, action' (Hester & Eglin, 1997, p. 20-21). In the case of doctoral pedagogy, the idea of pedagogy-in-action suggests and allows an investigation of how pedagogical design is enacted and how doctoral work is 'done' - how doctoral practices happen moment by moment, and across contexts and relationships. Because these practices are so much part of the everyday mundane work of 'doing' doctoral work, they can be overlooked as a set of actions and events that constitute what have been termed, more generally, 'doctoral practices' (Lee & Boud, 2009). A focus on the practices of everyday life shows the social, professional and institutional interactions as they unfold among participants. By close looking at these practices, we can show the embedded local work of social actions to produce identities (Hester & Eglin, 1997), such as that of being a doctoral supervisor and a doctoral candidate, or a laboratory research team leader, or a member of an ethnographic fieldwork team or a data analysis group. In working from a standpoint that recognises pedagogy in action, we can also conceptualise pedagogy as action in

that our discussion of pedagogy begins with a description of what is going on in the doctoral activity being examined, whether a data analysis group or a virtual research network meeting, as our two cases show, or other forms of doctoral activity, such as supervisor-student interactions. research and doctoral seminars, or laboratory talk. The description of these practices captures what happens in these interactions as they unfold, involving a close observation of those practices to show how the participants themselves co-configure and enact doctoral pedagogy.

After identifying 'what's going on', the next step is to make sense of those activities and relationships through examining them within the contexts of local and embedded cultures of doctoral practices. An investigation of these practices can show how those involved in doctoral education, such as doctoral students and supervisors, orient to the local practices and, through this orientation, constantly make and remake these local practices of doctoral pedagogy. We can see this orientation by close looking at what members say and do to show that the practices constantly make and remake who they are as members within these practices. Interaction does not construct a static set of roles or relationships, such as supervisor and student, but these are constantly being remade through the already underway action, and are always 'in flux' (Danby, 2000). Looking closely at 'live performances' of the work of doctoral pedagogy makes visible the dynamics of this remaking.

A close examination of the practices of doctoral engagement brings to the fore ways to look at the identity work happening through the everyday, ordinary activities of doing doctoral work, such as Danby's (2005) analysis of a chain of email exchanges as the shaping and reshaping of identity between a student and her supervisors over the course of the doctoral study. The traditional image of 'an essentially privatised and personalised' (Lee & Green, 1997, p. 5) doctoral student can be recast now to present alternative identities of doctoral student, supervisor or researcher. In the two cases presented in this paper, we call attention to the everyday work of members as they make connections, build relationships and do activities, as they engage in the work of doctoral pedagogy.

Case 1: Doctoralnet an international doctoral education network

The first case study is an account of a network bringing together students and experienced researchers from nine countries around the world (Australia, Canada, Denmark, Korea, Norway, Poland, Sweden, South Africa and Scotland) who are engaged in research in one extended, multi-disciplinary field: education in post- and non-school settings. Doctoralnet (www.doctoralnet.net) includes researchers and doctoral students engaged in research in workplace and organisational learning and higher, professional and vocational education, including online and e-learning research. The common themes connecting these research fields are the critical importance of learning within contemporary social and organisational life and the need to theorise learning in socially situated ways.

The network was established in order to address a problem of geographical dispersal and isolation, where sites and circumstances of learning are changing rapidly and where renewal through international networking and through linking doctoral research to larger programmes of collaborative research is considered necessary for the field to thrive. Universities in all nine countries were originally involved in the design and development of the network, the stated goal and purpose of which was to build opportunities for collaboration across the geographical, linguistic, cultural, institutional and disciplinary borders that shape the field. Doctoralnet operates largely as an online network, linked through a virtual research environment with a range of Web 2 affordances: online discussion, chat, videoconferencing, blogs, linked homepages and collaborative writing spaces such as wikis. Audio and video materials are linked through home university websites and through YouTube. Supplementing the online work is a commitment to face-toface meetings at key international conferences.

A key design feature of the network was the aim to build links between research and pedagogy that would inform all of the network's activities. That is, in contrast to undergraduate or Masters-level educational networks, Doctoralnet activities were designed to involve students and established researchers working together in activities that would build research collaborations among network members. At the same time, explicitly pedagogical activities were developed aiming to build capacities and knowledge among doctoral students in collaborative international exchange. It is this dual focus that shaped the particular activities and pedagogical principles underpinning the network. This focus also led to the aspiration of Doctoralnet becoming a network of member universities' graduate schools, populated by doctoral students and researchers, each of whom would also be networked through their respective research communities.

Two examples of how Doctoralnet has worked in action are detailed briefly here. The first is an explicitly pedagogical event. In 2009, a dedicated Doctoralnet miniconference was held in conjunction with an international research conference on 'Researching Work and Learning' (RWL6) at Roskilde, Denmark, which attracted many of the original senior members of the network. Eleven students from five member institutions in five countries presented papers and acted as discussants to student research presentations. Three months before the conference, an online workshop was held for all students planning to present at the mini-conference. Two late-stage doctoral students from UTS posted a clip on YouTube and moderated the discussion (see http://www.youtube.com/ watch?v=91iMn54S0CY). At the mini-conference, a group of first-semester doctoral students from Linköping University, Sweden, acted as discussants for papers presented by doctoral students from other universities in the network. Each presentation received a response from two discussants: a senior researcher in the network and a student member. The Linköping students had engaged closely with the paper they were to respond to prior to travelling to Denmark and had prepared written responses, as part of their early research training. A meeting on 'being a discussant' was held in a café in Copenhagen the day before the conference to rehearse strategies the students could utilise in their first experience of responding publicly to a research paper. During this meeting, these students asked if they could present their responses first as they were concerned that, if they went as second respondent, they would run out of questions and comments. A number of explicit pedagogical purposes were served: in addition to providing explicit scaffolding and role modelling through senior researchers and student members undertaking parallel tasks, there were opportunities to manage the interactions so that the pedagogical role of senior researchers was foregrounded. This offered particular support for those students whose first language was other than English and who were presenting their discussions in English.

These activities were in one sense prefigured and enabled through the explicit design of Doctoralnet. At the same time, they exceeded the imaginings of the original designers. The network's practices were made in action, with elaboration and redesign becoming hallmarks of the enactments in particular instances.

The second example illustrates how international research collaborations began to develop through the affordances of the network, thus demonstrating the unintended effects of the cumulative experiences and enactments over time. One of the first outcomes of the work within the international network was the recognition of the opportunity to engage external examiners and examination committee members among the member universities. These links have developed further through

the development of joint programmes of funded research that exploit the international links, enhance the strategic positioning of research initiatives, and tap into wider international research networks to secure funding and build sustainability. One such programme is a developing collaboration between Linköping University and University of Technology, Sydney (UTS), in the area of interprofessional education and collaborative practice in health. This collaboration has built in opportunities for doctoral students within the larger programme of research, through co-tutelle enrolment, joint supervision, shared resources, jointly developed theoretical and methodological framings and, in one case at least, joint fieldwork. A network member from one university has developed a methodological framework for undertaking collaborative cross-national ethnographic fieldwork in health service settings and is working with doctoral student members from the other university in the joint trialling of the methods. Student members are thus simultaneously being trained in ethnographic methods and co-researching on the joint project, involving both face-to-face work and online support, building strong international and methodological networks. Most recently, students are travelling to partner universities for a period of immersion in fieldwork and on-campus research activity, as part of their doctoral study. At the same time, further cross-international research training opportunities are being pursued by linking Doctoralnet members to EU and other professional learning research networks such as ProPEL at the University of Stirling (www.propel. stir.ac.uk), an original member of Doctoralnet.

One key aim in the original design of the network has been to generate a 'distributed' pedagogy - where the emphasis is not always, or only, 'vertical': students to supervisors or senior researchers. In practice, the network has offered a set of opportunities for doctoral students to undertake a range of activities with each other - in the more 'horizontal' relationships associated with peer learning and research collaboration (e.g. Boud & Lee, 2005, Pilbeam & Denyer, 2009). Some of these were pre-planned - part of the original design - and some were not and have emerged in the accumulated interactions associated with the history of the management of the network. For example, the online interactions through Skype and other social media have made visible many more opportunities for transnational knowledge exchange than originally imagined. The possibilities for innovative contributions to knowledge made possible through national boundary crossing and access to wider communities and resources (MacGregor, 2011; Singh & Cui, 2011) were somewhat unpredictable and remain emergent. There are many challenges to these attempts to

bring research and pedagogy together, which are explored further in Abrandt Dahlgren et al. (2012). These attempts warrant close documentation, to build practical understandings of what is required to achieve aspirational goals such as networked doctoral education.

Case 2: Transcript Analysis Group

The second case study presents an account of how one transcript analysis group (TAG), consisting of experienced and novice researchers and doctoral students, is a site for doctoral pedagogy. While undertaking data analysis is often part of learning how to be a scholar, there has been little showing how data analysis actually occurs in practice. Some guides are available that present detailed insights and guidelines into analysing data, such as Silverman's (2000, 2007, 2011) texts on analysing qualitative data. However, little is known about how data analysis sessions unfold over the course of a data analysis session, and hence how less experienced researchers, such as doctoral students, learn the 'tools of the trade' through participation in the group with skilled and experienced members of the particular research community.

The Transcript Analysis Group (TAG) was designed initially as a doctoral teaching resource by Carolyn Baker, from the University of Queensland, who initiated the group to bring together her current and graduated students to engage in shared collaborative data analysis. Following her death in 2003, the group continued, although the structure around the group has changed over time, circumstances, membership and personal and institutional agendas. The leadership is now distributed across the three Brisbane universities (Queensland University of Technology, University of Queensland, and Griffith University). The group currently has a membership of approximately 10-20 members, including expert and novice researchers, postgraduate research students and postgraduate research supervisors, who meet every two weeks within semester time to analyse transcripts using the methodologies of ethnomethodology, conversation analysis and membership categorisation analysis. Group members analyse data that have been audio or videorecorded and then transcribed using a method of transcription that takes into account what was said, how it was said, and accompanying features such as the silences, gaze and gestures of the participants. This group does not hold any 'formal' university position within any of the universities, and often may be seen to be 'under the radar' of what constitutes doctoral training. Nevertheless, it does hold an important position for many researchers, and for

doctoral students and their supervisors doing doctoral work in these methodologies.

By looking at the data analysis practices of the group through the lens of pedagogy, we make several observations about pedagogic design, and pedagogy-in-action. It is through close looking, by audio-recording the group's practices and making available for examination and reexamination these recorded practices, that we are able to show TAG as a site for pedagogic design and action.

A key feature of the design is that there is a clear sense of the work of the group - doing collaborative data analysis. While the group can be described as having a relatively open and informal design framework, there is a clear orientation to the purpose of the group; there is order in how the meetings operate, beginning with one invited or self-nominated researcher each time leading the session. That person brings along an audio or video recording of data, such as an audio-recorded interview or a videorecording of, for example, classroom or meeting talk, or client/professional talk, and the transcript of that data, and introduces this to the group. The main activity of the group, then, is to listen to, and investigate the data by focusing on how the interactions are produced, in order to discuss how particular social meanings and orders are being constructed and maintained within that particular situation.

Another key feature of the design is that there is a democratic process involved in that core members have a say in determining the activities of the group. While, initially, it was possible to make some assumptions about what was going on in the meetings in terms of who has the expert knowledge and who is a novice learner, a reflexive account that closely observes those interactions shows a far more complex set of relationships and activities underway. Harris et al. (2012) show that the relationships of supervisor-doctoral student, learner-teacher, or noviceexpert are not clear-cut. Rather, there is a blurring of these relationships as there is little or no orientation to the titles or authority of specific relationships, but rather an orientation to the unfolding interactions of the group members as they make sense of the data they are examining. For example, as discussed in Harris et al. (2012), a novice doctoral student can notice and identify within the data a phenomenon that brings new knowledge and understanding of that data, which the experienced researcher working with that data over several years acknowledges that he had not considered before.

Being part of the transcript analysis group means being part of a scholarly community where everyone is exposed to, and participates in, doing noticing of interactional features within the data. This is pedagogy-in-action. Everyone at various times is both novice and expert - such as expert at undertaking transcript analysis, and expert at 'noticing.' All participants within the transcript analysis session are immersed into a scholarly context that we describe as a pedagogic practice. As Herzfeld suggests, the participants of the transcript group are doing what the 'natives' (ie, researchers using conversation analysis) expect. Analytic

expertise is one pedagogic factor, and so is learning how to behave within this community. discourse is about 'culture in action' (Baker, 2000; Hester & Eglin, 1997). It is also about making visible what is invisible; in this instance the pedagogic work, as it unfolds moment by moment, often going unrecognised as a forum for

a 'distributed' pedagogy in which the boundaries between novice and expert members are blurred, unless explicit attention is drawn to it.

The design of TAG as a pedagogic site is one where the practices of the group have come about through collegial networking, and it has an organic ground-up design in that the core members, representatives from each university, regularly discuss how the group will be run and the focus of activity from semester to semester, year to year. At first glance, it appears that the person who most benefits from these sessions is the person whose data is being discussed. However, the design of the data sessions, with a focus on members' action, is such that the sessions offer all members the opportunity to participate in the discussion about the transcript and to be immersed in a pedagogic context where they are exposed to, and can participate in, talk about the methodology of doing conversation analysis. This approach shows a pedagogic device in action for developing analytic expertise in data analysis for all members, and not just for doctoral candidates.

The pedagogic work can be shown through how members interact to each other, introduce new ideas and display new understandings of how to undertake data analysis or display new understandings about what is observed in the data. Within this understanding, investigating how members participate in the work of doing data analysis is also investigating pedagogy in action, as the practices of doing data analysis can also be understood as doing pedagogic work (Harris et al., 2012). Researchers, both novice and expert, engage in pedagogic work by informing others

of new understandings about what is happening in the videorecorded and transcribed data as well as how to go about undertaking such analysis.

A key feature of this group is that the practices have emerged from the members themselves seeing a need not just for doctoral students to learn how to do methodology but also for themselves as participants in a scholarly community of data analysts. It is now not possible

> to consider the practices of the group without considering this activity through a lens that sees these practices as pedagogic activities. Through writing about the group's practices as pedagogy, it is possible to rethink and reconstitute what counts in terms of pedagogic design and activity.

These activities were in one sense prefigured and enabled through the explicit design of Doctoralnet. At the same time, they exceeded the imaginings of the original designers. The networks practices were made in action, with elaboration and redesign becoming hallmarks of the enactments in particular instances.

Discussion: pedagogical designs and enactments

There are difficulties associated with undertaking closeup work to understand doctoral practices. One difficulty is that close observation of practices means being able to have access to those practices. Being an insider, looking at one's own practices, can overcome some access issues but it also can be more difficult when observing upfront our own practices, or the practices of the institution and organisations of which we are part. As Woolgar (1988) and Atkinson (1981) point out, analysing close-up aspects of our practices means a suspension of commonsense and taken for granted practices. In many ways, an anthropologist in an alien cultural environment can more easily make observations of that culture because they have the capacity to see it as 'exotic' and observe it without the burden of being an everyday member within that environment. (Woolgar, 1988). Delaying acceptance of commonsense assumptions allows for a consideration of the context in new ways (Atkinson, 1981). We call for a reflexive position that aims to recover and sustain the uncertainty of the enquiry, as we interrogate and find strange the practices, in order to engage in a study of those practices.

In this section, we tease out some of the pedagogical principles informing the design of the work in the two case studies. While each case study has given varying degrees of emphasis to particular design elements, and enactment of those, there are three overarching principles underpinning both cases. The first is that doctoral pedagogy is a set of everyday practices that enact a distributional, or 'horizontalising,' intention, positioning the doctoral student alongside more knowledgeable and experienced colleagues, in research activities that orient to the work rather than to their respective institutional positionings. A second principle is that there is intention within design and flexibility of pedagogic practices that takes into account changing relationships and contexts, such as the nuanced work of scaffolding pedagogic moments through design and action. A third pedagogic principle is the recognition of the ineluctably social and collective nature of 'doing' doctoral work. Such culturein-action requires an orientation to devising activities to make possible opportunities for dialogue within networks that span countries, senior researchers and doctoral students, and research fields.

The pedagogical intentions for case study 1, Doctoralnet, were enacted out of three broad design principles, elaborated in more detail in Abrandt Dahlgren et al. (2012). First, activities are devised that facilitate the building of dialogue among senior researcher/doctoral student members; institutions, countries and research interests. Second, the activities seek to enact a horisontalising pedagogical design, positioning the doctoral student as a knowledgeable colleague-to-be, albeit with a different knowledge, experience, and intention from those of the more experienced researchers. The third, related principle involves fostering senior researchers' sensitivity to the incompleteness - or 'becoming-ness' of the students' conceptualisations of their research, teasing out what kind of scaffolding the students need in order to be able to articulate their intention more clearly and coherently. These principles inform a range of the key strategies, of which the following are some examples.

Many strategies enact a horisontalising, boundary-crossing principle along a number of different lines: institutional, national, linguistic, theoretical and methodological. The developing discussions about international research collaborations have rendered visible a range of challenges: communicating in English for students of different member countries; the different doctoral systems with different practices and cultural politics; the spatio-temporal and practical complexities of geographical and regional distances; the politics and practices of connecting students from diverse linguistic communities to the anglophone world of international scholarship. Increasingly, strategies have involved design multi-format modes of participating: online a-synchronous written discussion, conferencing, face-to-face meetings, and so on. One of the hallmarks of Web-2 technologies is the almost seamless move from writing-based to talk-based interactions across network members. A further set of design strategies involves the creation of opportunities for students early in their doctoral candidature to articulate their research intentions in an international setting of peer students and researchers in the field. Relatedly, doctoral students are brought into collegial working forms such as work-in-progress seminars with research peers, both senior and more junior, in respective member universities. These strategies provide opportunity for shifting positions, as experienced researchers present their working manuscripts and invite doctoral students to question and critique. When deliberately designed, these strategies have offered important role-modelling opportunities within an explicitly scaffolded environment, where students are coached in forms of elaborative and critical exchange with seniors as peers sharing their own developing writing.

The pedagogic intentions for case study 2, the Transcript Analysis Group, are enacted out of three broad pedagogic design principles. The first is that pedagogic practices are made possible when there is immersion within everyday research contexts that make visible, through enactment, ways of doing analysis. A second design principle is that pedagogic practices are both systematic and opportunistic, in that there are both planned and serendipitous events that cannot be foreseen or anticipated, but which generate pedagogic moments. A third design principle, which encompasses the first two, is that doctoral design and enactment requires as an essential element the social and collective nature of 'culture-in-action.' Knowledge production requires a set of social conditions, and valuing and designing a pedagogic order is not possible if done in isolation

The case of the transcript analysis group contributes one approach to understanding social practices associated with pedagogy-in-action. We show that, rather than being pre-determined by institutional roles or strict invocations of the roles of expert and learner, concepts of expertise and learning can be built through contributing to collaborative talk and analysis, and stances of learner and expert are enacted.

Being a participant and engaging in analytic practice where participants' learning can be supported through their membership and participation is a form of doctoral pedagogic practice. In considering how the transcript analysis sessions were designed and enacted, there was a clear awareness that this type of activity represents a move away from more traditional assumptions of experts and learners, as the participation space becomes blurred between roles of participant and analyst, novice

and expert, doctoral student and senior researcher. Pedagogical practice has to be sufficiently articulated to show how these practices can be named as examples of doctoral practices and, at the same time, be sufficiently flexible to manage emerging and sometimes competing issues and agendas, changing contexts, both local and globally, and a recognition that outcomes are not predetermined and set up as goals. Rather, while design is deliberate, the practices themselves offer multiple possibilities of enactment.

Conclusion

This paper contributes to an emerging body of work that present accounts of doctoral pedagogies beyond the supervision relationship. We have outlined conceptual resources for making visible aspects of doctoral practices that typically are invisible or given scant attention in guidelines for doctoral practices, and illustrated these through two brief case studies. Together, the two cases open up discussion by recognising and valuing that the doctoral practices we describe here are no longer 'addons' to the doctoral experience for students but rather are being understood increasingly as the 'new basics'. This shift brings growing credibility to practices that once were considered marginal or 'extra-curricular' - sets of practices increasingly valued as fundamental and core doctoral experiences for all doctoral students.

We began the paper by referring to Sting's account of close looking and 'slowing it down enough ' to make a case for studying existing pedagogical practices (our own and others), as a strategy to find the pedagogy within everyday practices and to inform us how those practices work. Within the two case studies we presented, we took up some aspects of observing and understanding 'live performance', such as the talk and interaction of research groups, which we had to gloss here for reasons of space. These descriptions showed the texture of relationships and how they were assembled out of, and within, doctoral practices. Both cases describe programmes that are built on strong conceptual underpinnings and we show that they have emerged through a reflexive examination of practices strongly grounded in theoretical and methodological research understandings. In this way, these programmes cannot be generic models dropped into place; rather, they have come about as a consequence of local doctoral practices designed to take up identified specific 'gaps'. What can be taken from them is the articulation of the pedagogical principles and the broad set of relations between design and action in doctoral pedagogy.

The two cases presented here deviate in certain respects from many of the doctoral training programmes currently being put into place in university contexts. One key difference is that the first case study opens up the affordances of digital media to facilitate an international doctoral network, still a rare and new environment for doctoral education well beyond the structures of supervision (see, for example, the discussion of the Africa-EU network; MacGregor, 2011). Another key difference is that the second case represents an example of activity that might routinely be framed as located with the core business of doing research rather than doing education, training, or pedagogy. However, such practices are not solely the domain of a research enterprise, but legitimately can be reframed as having an educational agenda in terms of learning through participation. The types of activity discussed in the two cases presented in this paper, we believe, will be recognised increasingly as pedagogical within university postgraduate contexts, and no doubt the list of what counts as doctoral pedagogy will also encompass a broader definition and enactment.

It has not been usual practice to give attention to documenting the pedagogic work that we do in doctoral education, perhaps because the everyday practices of 'doing' a doctorate have both become so prevalent and yet still draw from older, more elite, forms of pedagogy that are taken for granted. There are difficulties in making current practices sufficiently 'strange' to reflexively consider what is happening within them. We suggest becoming aware of what is already happening by close-up observations of the pedagogical work across universities and doctoral programmes that are meeting specific core needs of specific groups involved in doctoral education. We propose that the field is ready to attend to the 'next challenge for doctoral education' (Green, 2009), a closer empirical examination of these practices and relationships.

Susan Danby is Professor of Education at the Queensland University of Technology.

Alison Lee is Professor of Education and Director of the Centre for Research in Learning and Change at the University of Technology, Sydney.

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